RAW SEQUENCE LISTING
ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH
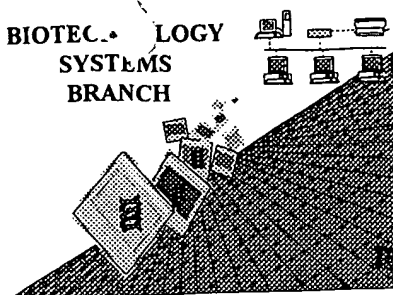
The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: *09/462,629*

Source: *1638*

Date Processed by STIC: *1/24/2001*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: <u>patin21help@uspto.gov</u> or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: <u>patin3help@uspto.gov</u> or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

<u>Checker Version 3.0 can be down loaded from the USPTO website at the following address:</u>
http://www.uspto.gov/web/offices/pac/checker

1600
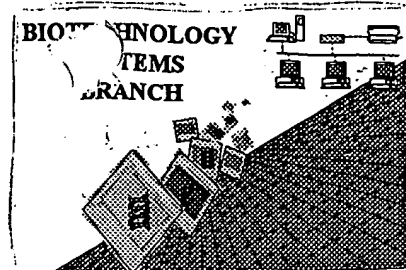
CRF Problem Report

The Scientific and Technical Information Center (STIC) experienced a problem when processing the following computer readable form (CRF):

Application Serial Number: 09/462,629 A

Filing Date: 1/11/2000

Date Processed by STIC: 3/4/2002

RECEIVED

MAR 1 9 2002

TECH CENTER 1600/2900

STIC Contact: **Mark Spencer, 703-308-4212**

Nature of Problem:

The CRF (was):

___✓___ (circle one) Damaged or Unreadable (for Unreadable, see attached)

_____ Blank (no files on CRF) (see attached)

_____ Empty file (filename present, but no bytes in file) (see attached)

_____ Virus-infected. Virus name: _____ The STIC will not process the CRF.

_____ Not saved in ASCII text

_____ Sequence Listing was embedded in the file. According to Sequence Rules, submitted file should **only** be the Sequence Listing.

_____ Did not contain a Sequence Listing. (see attached sample)

_____ Other:

PLEASE USE THE CHECKER VERSION 3.1 PROGRAM TO REDUCE ERRORS. SEE BELOW FOR ADDRESS:
        http:/www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202**
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
            Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service , or other** delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Sequence Count Sheet	Application No.	Applicant(s)
	09/462,629	SEULBERGER ET AL.
	Examiner	Art Unit	
	David H Kruse	1638	

DATE OF COUNT _____

Mark only one space below

☐   **(CRFN)** (CRF is unreadable; use CRF Diskette Problem Report)

☐   **(CRFD)** (CRF does not comply; use Notice to Comply)

☐   **(CRFR)** (CRF required but none submitted; use Notice to Comply)

☒   **(bona fide)** (second or subsequent letter to applicant reporting bona fide attempt to comply; use Notice to Comply and send copy of RSL)

☐   **(non bona fide)** (second or subsequent letter to applicant reporting non-bona fide attempt to comply; use Notice to Comply and send copy of RSL)

RAW SEQUENCE LISTING   DATE: 01/24/2001
PATENT APPLICATION: US/09/462,629   TIME: 13:38:32

Input Set : A:\462629.txt
Output Set: N:\CRF3\01242001\I462629.raw

```
 3 <110> APPLICANT: Seulberger, Harald
 4         Lerchl, Jenms
 5         Schmidt, Ralf-Michael
 6         Krupinska, Karin
 7         Falk, Jon
 9 <120> TITLE OF INVENTION: DNA sequence encoding a hydroxyphenylpyruvate
dioxygenase, and its
10         overproduction in plants
 0 <130> FILE REFERENCE:
12 <140> CURRENT APPLICATION NUMBER: US 09/462,629
13 <141> CURRENT FILING DATE: 2000-01-11
15 <150> PRIOR APPLICATION NUMBER: PCT/EP98/03832
16 <151> PRIOR FILING DATE: 1998-06-23
18 <160> NUMBER OF SEQ ID NOS: 2
20 <170> SOFTWARE: WordPerfect version 6.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 1565
24 <212> TYPE: DNA
25 <213> ORGANISM: hppd from barley
27 <220> FEATURE:
28 <221> NAME/KEY: CDS
29 <222> LOCATION: 9 ... 1313
31 <400> SEQUENCE: 1
33 cgcacacc atg ccg ccc acc ccc acc acc ccc gcg gct acc ggc gcc gcc50
34          Met Pro Pro Thr Pro Thr Thr Pro Ala Ala Thr Gly Ala Ala
35           1           5                   10
37 gcc gcg gtg acg ccg gag cac gcg cga ccg cac cga atg gtc cgc ttc98
38 Ala Ala Val Thr Pro Glu His Ala Arg Pro His Arg Met Val Arg Phe
39 15               20                  25                  30
41 aac ccg cgc agc gac cgc ttc cac acg ctc tcc ttc cac cac gtc gag146
42 Asn Pro Arg Ser Asp Arg Phe His Thr Leu Ser Phe His His Val Glu
43               35                  40                  45
45 ttc tgg tgc gcg gac gcc gcc tcc gcc gcc ggc cgc ttc gcg ttc gcg194
46 Phe Trp Cys Ala Asp Ala Ala Ser Ala Ala Gly Arg Phe Ala Phe Ala
47               50                  55                  60
49 ctc ggc gcg ccg ctc gcc gcc agg tcc gac ctc tcc acg ggg aac tcc242
50 Leu Gly Ala Pro Leu Ala Ala Arg Ser Asp Leu Ser Thr Gly Asn Ser
51           65                  70                  75
53 gcg cac gcc tcc cag ctg ctc cgc tcg ggc tcc ctc gcc ttc ctc ttc290
54 Ala His Ala Ser Gln Leu Leu Arg Ser Gly Ser Leu Ala Phe Leu Phe
55       80                  85                  90
57 acc gcg ccc tac gcc aac ggc tgc gac gcc gcc acc gcc tcc ctg ccc338
58 Thr Ala Pro Tyr Ala Asn Gly Cys Asp Ala Ala Thr Ala Ser Leu Pro
59 95                  100                 105                 110
61 tcc ttc tcc gcc gac gcc gcg cgc cgg ttc tcc gcc gac cac ggg atc386
62 Ser Phe Ser Ala Asp Ala Ala Arg Arg Phe Ser Ala Asp His Gly Ile
63               115                 120                 125
65 gcg gtg cgc tcc gta gcg ctg cgc gtc gca gac gcc gcc gag gcc ttc434
```

```
 66 Ala Val Arg Ser Val Ala Leu Arg Val Ala Asp Ala Ala Glu Ala Phe
 67         130             135             140
 69 cgc gcc agt cgt cga cgg ggc gcg cgc ccg gcc ttc gcc ccc gtg gac482
 70 Arg Ala Ser Arg Arg Arg Gly Ala Arg Pro Ala Phe Ala Pro Val Asp
 71         145             150             155
 73 ctc ggc cgc ggc ttc gcg ttc gcg gag gtc gag ctc tac ggc gac gtc530
 74 Leu Gly Arg Gly Phe Ala Phe Ala Glu Val Glu Leu Tyr Gly Asp Val
 75         160             165             170
 77 gtg ctc cgc ttc gtc agc cac ccg gac ggc acg gac gtg ccc ttc ttg578
 78 Val Leu Arg Phe Val Ser His Pro Asp Gly Thr Asp Val Pro Phe Leu
 79 175             180              185             190
 81 ccg ggg ttc gag ggc gta acc aac ccg gac gcc gtg gac tac ggc ctg626
 82 Pro Gly Phe Glu Gly Val Thr Asn Pro Asp Ala Val Asp Tyr Gly Leu
 83             195             200             205
 85 acg cgg ttc gac cac gtc gtc ggc aac gtc ccg gag ctt gcc ccc gcc674
 86 Thr Arg Phe Asp His Val Val Gly Asn Val Pro Glu Leu Ala Pro Ala
 87         210             215             220
 89 gca gcc tac atc gcc ggg ttc acg ggg ttc cac gag ttc gcc gag ttc722
 90 Ala Ala Tyr Ile Ala Gly Phe Thr Gly Phe His Glu Phe Ala Glu Phe
 91         225             230             235
 93 acg gcg gag gac gtg ggc acg acc gag agc ggg ctc aac tcg gtg gtg770
 94 Thr Ala Glu Asp Val Gly Thr Thr Glu Ser Gly Leu Asn Ser Val Val
 95     240             245             250
 97 ctc gcc aac aac tcg gag ggc gtg ctg ctg ccg ctc aac gag ccg gtg818
 98 Leu Ala Asn Asn Ser Glu Gly Val Leu Leu Pro Leu Asn Glu Pro Val
 99 255             260             265             270
101 cac ggc acc aag cgc cgg agc cag ata cag acg ttc ctg gaa cac cac866
102 His Gly Thr Lys Arg Arg Ser Gln Ile Gln Thr Phe Leu Glu His His
103             275             280             285
105 ggc ggc ccg ggc gtg cag cac atc gcg gtg gcc agc agt gac gtg ctc914
106 Gly Gly Pro Gly Val Gln His Ile Ala Val Ala Ser Ser Asp Val Leu
107             290             295             300
109 agg acg ctc agg aag atg cgt gcg cgc tcc gcc atg ggc ggc ttc gac962
110 Arg Thr Leu Arg Lys Met Arg Ala Arg Ser Ala Met Gly Gly Phe Asp
111         305             310             315
113 ttc ctg cca ccc ccg ctg ccg aag tac tac gaa ggc gtg cga cgc ctt1010
114 Phe Leu Pro Pro Pro Leu Pro Lys Tyr Tyr Glu Gly Val Arg Arg Leu
115     320             325             330
117 gcc ggg gat gtc ctc tcg gag gcg cag atc aag gaa tgc cag gag ctg1058
118 Ala Gly Asp Val Leu Ser Glu Ala Gln Ile Lys Glu Cys Gln Glu Leu
119 335             340             345             350
121 ggt gtg ctc gtc gat agg gac gac caa ggg gtg ttg ctc caa atc ttc1106
122 Gly Val Leu Val Asp Arg Asp Asp Gln Gly Val Leu Leu Gln Ile Phe
123             355             360             365
125 acc aag cca gta ggg gac agg ccg acc ttg ttc ctg gag atg atc cag1154
126 Thr Lys Pro Val Gly Asp Arg Pro Thr Leu Phe Leu Glu Met Ile Gln
127             370             375             380
129 agg atc ggg tgc atg gag aag gac gag aga ggg gaa gag tac cag aag1202
130 Arg Ile Gly Cys Met Glu Lys Asp Glu Arg Gly Glu Glu Tyr Gln Lys
```

RAW SEQUENCE LISTING   DATE: 01/24/2001
PATENT APPLICATION: US/09/462,629   TIME: 13:38:32

Input Set : A:\462629.txt
Output Set: N:\CRF3\01242001\I462629.raw

```
131          385              390              395
133 ggt ggc tgc ggc ggg ttc ggc aaa ggc aac ttc tcc gag ctg ttc aag1250
134 Gly Gly Cys Gly Gly Phe Gly Lys Gly Asn Phe Ser Glu Leu Phe Lys
135          400              405              410
137 tcc att gaa gat tac gag aag tcc ctt gaa gcc aag caa tct gct gca1298
138 Ser Ile Glu Asp Tyr Glu Lys Ser Leu Glu Ala Lys Gln Ser Ala Ala
139 415              420              425              430
141 gtt cag gga tca taggatagaa gctggtcctt gtatcatggt ctcatggagc  1350
142 Val Gln Gly Ser
144 aaaagaaaac aatgttgttt gtaatatgcg tcgcacaatt atatcaatgt tataattggt1410
146 gaagctgaag acagatgtat cctatgtatg atgggtgtaa tggatggtag aggggctcac1470
148 acatgaagaa aatgtagcgt tgacattgtt gtacaatctt gcttgcaagt aaaataaaga1530
150 acagattttg agttctgcaa aaaaaaaaaa aaaaa                          1565
153 <210> SEQ ID NO: 2
154 <211> LENGTH: 434
155 <212> TYPE: PRT
W--> 157 <213> ORGANISM:
157 <400> SEQUENCE: 2
159 Met Pro Pro Thr Pro Thr Thr Pro Ala Ala Thr Gly Ala Ala Ala Ala
160    1           5              10              15
162 Val Thr Pro Glu His Ala Arg Pro His Arg Met Val Arg Phe Asn Pro
163          20              25              30
165 Arg Ser Asp Arg Phe His Thr Leu Ser Phe His His Val Glu Phe Trp
166          35              40              45
168 Cys Ala Asp Ala Ala Ser Ala Ala Gly Arg Phe Ala Phe Ala Leu Gly
169       50              55              60
171 Ala Pro Leu Ala Ala Arg Ser Asp Leu Ser Thr Gly Asn Ser Ala His
172  65              70              75              80
174 Ala Ser Gln Leu Leu Arg Ser Gly Ser Leu Ala Phe Leu Phe Thr Ala
175              85              90              95
177 Pro Tyr Ala Asn Gly Cys Asp Ala Ala Thr Ala Ser Leu Pro Ser Phe
178             100             105             110
180 Ser Ala Asp Ala Ala Arg Arg Phe Ser Ala Asp His Gly Ile Ala Val
181          115             120             125
183 Arg Ser Val Ala Leu Arg Val Ala Asp Ala Ala Glu Ala Phe Arg Ala
184       130             135             140
186 Ser Arg Arg Arg Gly Ala Arg Pro Ala Phe Ala Pro Val Asp Leu Gly
187 145.             150             155             160
189 Arg Gly Phe Ala Phe Ala Glu Val Glu Leu Tyr Gly Asp Val Val Leu
190              165             170             175
192 Arg Phe Val Ser His Pro Asp Gly Thr Asp Val Pro Phe Leu Pro Gly
193             180             185             190
195 Phe Glu Gly Val Thr Asn Pro Asp Ala Val Asp Tyr Gly Leu Thr Arg
196          195             200             205
198 Phe Asp His Val Val Gly Asn Val Pro Glu Leu Ala Pro Ala Ala Ala
199       210             215             220
201 Tyr Ile Ala Gly Phe Thr Gly Phe His Glu Phe Ala Glu Phe Thr Ala
202 225             230             235             240
204 Glu Asp Val Gly Thr Thr Glu Ser Gly Leu Asn Ser Val Val Leu Ala
```

This is numeric identifier AND its response are mandatory. See circled portion of item 12 on Error Summary sheet.

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/462,629

DATE: 01/24/2001
TIME: 13:38:32

Input Set : A:\462629.txt
Output Set: N:\CRF3\01242001\I462629.raw

```
205                   245                250                  255
207 Asn Asn Ser Glu Gly Val Leu Leu Pro Leu Asn Glu Pro Val His Gly
208                   260                265                  270
210 Thr Lys Arg Arg Ser Gln Ile Gln Thr Phe Leu Glu His His Gly Gly
211         275                280                285
213 Pro Gly Val Gln His Ile Ala Val Ala Ser Ser Asp Val Leu Arg Thr
214         290                295                300
216 Leu Arg Lys Met Arg Ala Arg Ser Ala Met Gly Gly Phe Asp Phe Leu
217 305                 310                315                  320
219 Pro Pro Pro Leu Pro Lys Tyr Tyr Glu Gly Val Arg Arg Leu Ala Gly
220                   325                330                  335
222 Asp Val Leu Ser Glu Ala Gln Ile Lys Glu Cys Gln Glu Leu Gly Val
223                   340                345                350
225 Leu Val Asp Arg Asp Asp Gln Gly Val Leu Leu Gln Ile Phe Thr Lys
226         355                360                365
228 Pro Val Gly Asp Arg Pro Thr Leu Phe Leu Glu Met Ile Gln Arg Ile
229         370                375                380
231 Gly Cys Met Glu Lys Asp Glu Arg Gly Glu Glu Tyr Gln Lys Gly Gly
232 385                 390                395                  400
234 Cys Gly Gly Phe Gly Lys Gly Asn Phe Ser Glu Leu Phe Lys Ser Ile
235                   405                410                  415
237 Glu Asp Tyr Glu Lys Ser Leu Glu Ala Lys Gln Ser Ala Ala Val Gln
238                   420                425                430
240 Gly Ser
```

VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/462,629**

DATE: 01/24/2001
TIME: 13:38:33

Input Set : **A:\462629.txt**
Output Set: **N:\CRF3\01242001\I462629.raw**

L:0 M:201 W: Mandatory field data missing, FILE REFERENCE
L:157 M:282 W: Numeric Field Identifier Missing, <213> is required.